PLANT AND SOIL

Contents Volume 308 Nos. 1–2 July 2008

Regular Articles

Growth response of komatsuna (*Brassica rapa* var. peruviridis) to root and foliar applications of phosphite
H.T.B. Thao · T. Yamakawa · K. Shibata · P.S. Sarr and A.K. Myint **1–10**

Growth, production and carbon sequestration of silvopastoral systems with native timber species in the dry lowlands of Costa Rica
H.J. Andrade · R. Brook and M. Ibrahim **11–22**

Minimum pulses of stable and radioactive carbon isotopes to detect belowground carbon transfer between plants
L.J. Philip and S.W. Simard **23–35**

Chemical composition of forest floor and consequences for nutrient availability after wildfire and harvesting in the boreal forest
E. Thiffault · K.D. Hannam · S.A. Quideau · D. Paré · N. Bélanger · S.-W. Oh and A.D. Munson **37–53**

Effects of inoculation with native arbuscular mycorrhizal fungi on clonal growth of *Potentilla reptans* and *Fragaria moschata* (Rosaceae)
R. Sudová and M. Vosátka **55–67**

Seasonal patterns in depth of water uptake under contrasting annual and perennial systems in the Corn Belt Region of the Midwestern U.S.
H. Asbjornsen · G. Shepherd · M. Helmers and G. Mora **69–92**

Soil microbial and faunal responses to herbicide tolerant maize and herbicide in two soils
B.S. Griffiths · S. Caul · J. Thompson · C.A. Hackett · J. Cortet · C. Pernin and P.H. Krogh **93–103**

Fluxes of nitrous oxide, methane and carbon dioxide during freezing–thawing cycles in an Inner Mongolian steppe
J. Holst · C. Liu · Z. Yao · N. Brüggemann · X. Zheng · M. Giese and K. Butterbach-Bahl **105–117**

Does a warmer climate with frequent mild water shortages protect grassland communities against a prolonged drought?
C. Zavalloni · B. Gielen · C.M.H.M. Lemmens · H.J. De Boeck · S. Blasi · S. Van den Bergh · I. Nijs and R. Ceulemans **119–130**

Assessment of soil nitrogen and phosphorous availability under elevated CO_2 and N-fertilization in a short rotation poplar plantation
A. Lagomarsino · M.C. Moscatelli · M.R. Hoosbeek · P. De Angelis and S. Grego **131–147**

Soil properties under Norway spruce differ in spruce dominated and mixed broadleaf forests of the Southern Taiga
E. Bonifacio · A. Caimi · G. Falsone · S. Ya. Trofimov · E. Zanini and D.L. Godbold **149–159**

Promotion of tomato (*Lycopersicon esculentum* Mill.) plant growth by rhizosphere competent 1-aminocyclopropane-1-carboxylic acid deaminase-producing streptomycete actinomycetes
K.A. El-Tarabily **161–174**

Soil biotic processes remain remarkably stable after 100-year extreme weather events in experimental grassland and heath
J. Kreyling · C. Beierkuhnlein · M. Elmer · K. Pritsch · M. Radovski · M. Schloter · J. Wöllecke and Anke Jentsch **175–188**

Responses of ectomycorrhizal American elm (*Ulmus americana*) seedlings to salinity and soil compaction
M. Calvo Polanco · J.J. Zwiazek and M.C. Voicu **189–200**

Vertical distribution, biomass, production and turnover of fine roots along a topographical gradient in a sandy shrubland
G. Huang · X.-y. Zhao · Y.-g. Su · H.-l. Zhao and T.-h. Zhang **201–212**

The effects of organic amendments on mineral element uptake and fruit quality of raspberries
J. Hargreaves · M.S. Adl · P.R. Warman and H.P.V. Rupasinghe **213–226**

Transpiration estimation of banana (*Musa* sp.) plants with the thermal dissipation method
H.-J. Liu · S. Cohen · J. Tanny · J.H. Lemcoff and G. Huang **227–238**

The influence of soil type and altered lignin biosynthesis on the growth and above and belowground biomass allocation of *Populus tremuloides*
J.E. Hancock · K.L. Bradley · C.P. Giardina and K.S. Pregitzer **239–253**

Effect of fungal fusaric acid on the root and leaf physiology of watermelon (*Citrullus lanatus*) seedlings
H.-s. Wu · X.-m. Yin · D.-y. Liu · N. Ling · W. Bao · R.-r. Ying · Y.-y. Zhu · S.-w. Guo and Q.-r. Shen **255–266**

Suitability of mycorrhiza-defective mutant/wildtype plant pairs (*Solanum lycopersicum L.* cv Micro-Tom) to address questions in mycorrhizal soil ecology
M.C. Rillig · P.W. Ramsey · J.E. Gannon · D.L. Mummey · V. Gadkar and Y. Kapulnik **267–275**

Available online
www.springerlink.com

Close-up of Willamette raspberries used in field trials in Boutilliers Point, Nova Scotia, Canada. pp. 213–226